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ABSTRACT

The "direct instructional method" of teaching is a systematic approach for directing the learner's attention and eliciting an appropriate response. While this method is generally used in small group instruction, this paper suggests that it can be equally effective in large groups, and examples are given of ways to use this strategy. Application of the method to teaching small elements of a skill sequence as well as to the teaching of concepts is illustrated. (JD)

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AN APPLICATION OF THE DIRECT INSTRUCTIONAL MODEL* TO LARGE GROUP INSTRUCTION: A STATEMENT OF POSITION

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* The direct instructional method applied in this paper is given full explanation with reference to small groups in Becker, W. C., Engelmann, S. and Thomas, D. R. Teaching 2: Cognitive Learning and Instruction. Science Research Associates: Chicago, 1975.

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Introduction

The direct instructional method has in the past proven effective with small groups of learners (Becker and Englemann, 1973; Hofmeister, 1977). It is the thesis of this paper that the small model portrays not a separate kind of teaching useful only for disadvantaged and/or handicapped learners in a small group setting, but a general model of "good" teaching which can be applied to tasks and concepts to be taught regardless of the setting. To be sure, the model may be more easily applied, more carefully applied, and applied with greater effect in the small group setting. But, the position of this author remains the same, that is that good teaching is good teaching whatever the setting.

Thus, while more difficulty in monitoring individual student's attending behavior may be encountered; while more variables in the environment may be left to chance; and, while the real gains in skill mastery may be less than in a small group setting, the method is still a viable, and indeed, preferable alternative to other models of large group instruction. Certainly with any method (save perhaps, the lecture method), a group of five learners would seem preferable to a group of thirty. Unfortunately, most educators cannot opt for groups of five. Therefore, the strategies which we employ must be suitable for the world as we encounter it. It is not always possible to group learners into small groups for

instruction. It is not always possible to program students into individualized self instructional sequences. Nor is it always possible to mediate instruction in such a way that learning is maximized.

The above are not undesireable alternatives. They can and should be used when possible and practical. There are times, however, when large group instruction by an instructor interacting with a group of 25-30 or more students is either desireable for efficiency's sake or is the only available alternative. It is for these times that this author is writing.

Rationale

There are several advantages for the instructor who uses the direct instructional method in teaching large groups. First, the percentage of learners actually attending to the instructor should increase. As pointed out previously, it may prove more difficult for the instructor to monitor this behavior in a large group, however, the effect is similar.

Secondly, the percentage of the learners attending to a presentation of a task or concept should increase. The care with which specific details of each task and/or concept are attended to may be left somewhat to chance; however, again the effect is similar. Finally, the percentage of learners competent to perform when performance is called for should increase.

It must be remembered, with regard to this rationale, that the comparison is not to be between large and small groups using this method. It is to be between large groups not using and large groups using this method. When this comparison is the comparison made the systematic, direct method should gain support.

Methodology

The direct instructional method is a systematic approach to gaining and directing the learner's attention and eliciting an appropriate response. It is precisely at this point that many instructors fail in their instruction. That is, they fail to gain the attention of their learner audience and so, fail to provide a meaningful learning experience. Lecturers, like this author, tend to drone on, assuming that the audience is following along with them. If more speakers would say (and writers write), "LOOK HERE," more, learners would attend and learn more.

The Levels of Instruction

The flowchart in Figure 1 depicts the presentation sequence as outlined by Becker, Engelmann and Thomas (1975). A cursory examination shows three levels of presentation. The first might be termed the attention level. At this level the learners, if responding correctly, are simply attending to the instructor. This sounds simple and obvious, however, in

terms of instruction this is the level at which much instruction fails. The second level relates to directing the students' attention to the task at hand. Failure in instruction can and often does occur at this level, but probably not as often as at level one. Finally, level three elicits the task response. In small group instruction oral responses are often elicited. This may not be practical in a large group setting. In many instances written responses may be required. As indicated previously this adaptation may cause some loss of effectiveness, etc., but as was previously noted, the comparison is not between small and large group effectiveness.

It should be noted at this point that a short pause between level two and level three is desireable. This is especially appropriate if responses are oral in nature since the pause allows the learners to get ready to respond simultaneously. Simultaneous response helps to eliminate late respondents mimicking earlier respondents and, in the case of oral responses, it assists the teacher in identifying errors.

The "Do It" Signal

Immediately following the short pause described above, the instructor must provide a signal for task response. This signal provides the opportunity for immediate and simultaneous response. The signal can be verbal ("Say it," "Write it,") or motor (drop of hand, finger snap).

Learners usually must be trained to respond to "do it" signals. This can be accomplished by reinforcing immediate

responses following the signal as part of a shaping procedure if necessary. In this case specific verbal praise following responses which are immediate and simultaneous should be administered.

Shaping the Task Response

In most instances a minimum level of attention to task or task responses (e.g., 90% of the learners on task for 90% of the presentations) will not be present in a large group. In order to achieve this level a simple shaping procedure is required. Again, referring to Figure 1 the reinforcer is shown at level three following an appropriate task response. Obviously, however, no reinforcer can be administered if at level one the learner is not attending. The reinforcer can then be moved to level one until the minimum attention level is achieved. Subsequently, the reinforcer is administered only at level two following appropriate attention to task. And then, finally, the reinforcer can be moved to level three for reinforcing the entire sequence of behaviors from attention to task response. If training for the "do it" signal is required, it should be inserted between level two and level three.

Instructional Examples

The teaching of tasks (elements of skill sequences) and concepts (generalization and discrimination of set members and nonmembers), along with taking attendance and counting milk money, take up most of an instructor's time. The following two examples will relate to these two kinds of instruction.

Teaching Tasks

A task is usually defined as one element of a skill sequence. In the skill sequence related to learning to read, for example, sound-symbol association for the letter m is one task. The following list depicts the direct instruction method in use with this task.

Instructor: "Class."

Learners: (Attention to instructor.)

Instructor: "What sound does this letter make?" (Holds up card with m printed on it. Points to m.)

Learners: (Attention to letter m.)

Instructor: (Pause.)

Instructor: "What sound?" (Taps card under letter m.)

Learners: "M-m-m-m-m-m."

Instructor: Very good. This letter says "M-m-m-m."

This sequence includes all of the elements shown in Figure 1 plus the "pause step" previously described. The series of steps included can be used with virtually any task. And, if several related tasks are presented together after the class has been trained to respond in this manner, the first two to four steps may be omitted. They need only be used again if attention begins to decrease.

Teaching Concepts

The steps involved in teaching a concept do not vary significantly from the steps listed above. The major difference, of course, is seen in the outcome of a series of these presentations.

For task teaching, as indicated above, the outcome is the association of appropriate sounds with several symbols. On the other hand, with concept teaching the outcome is appropriate identification of new (not previously encountered) members of a set and nonmembers for the same set. The objective is generalization of previous learning about members to new members and discrimination of new (not previously encountered) nonmembers. The process being described, of course, is discrimination learning. When a learner can consistently discriminate between members and nonmembers of a set (concept) given new members of that set then she/he is said to have learned the concept (Becker, Engelmann and Thomas, 1975). The following sequence of steps is an example.

PRACTICE EXAMPLES AND NONEXAMPLES

Instructor: "Class."

Learners: (Attention to teacher.)

Instructor: "Is this an arrow?" (Points to arrow on chalkboard.) ➧

Learners: (Attention to arrow.)

Instructor: (Pause.)

Instructor: "What is this?" (Taps chalkboard.)

Learners: "An arrow."

Instructor: "Good responding. This is an arrow."

Instructor: "Is this an arrow?" (Points.) ➡

Learners: (Attention to arrow.)

Instructor: (Pause.)

Instructor: "What is it?" (Taps.)

Learners: "An arrow."

Instructor: "Right!"

Instructor: "Is this an arrow?" (Points.)

Learners: (Attention to arrow.)

Instructor: (Pause.)

Instructor: (Taps.)

Learners: "An arrow."

Instructor: "Correct answer. Very good!

Instructor: "Is this an arrow?" (Points.)

Learners: (Attention to circle.)

Instructor: (Pause.)

Instructor: (Taps.)

Learners: "No."

Instructor: "Good answer. This is not an arrow."

Instructor: "Is this an arrow?" (Points.) A

Learners: (Attention to letter a.)

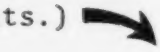
Instructor: (Pause.)

Instructor: (Taps.)

Learners: "No."

Instructor: "Excellent. That wasn't an arrow either."

TESTING FOR NEW EXAMPLES AND NONEXAMPLES.

Instructor: "An arrow?" (Points.) 

Learners: (Attention to arrow.)

Instructor: (Pause.)

Instructor: (Taps.)

Learners: "Yes."

Instructor: "Great. This is a new kind of arrow."

Instructor: "An arrow? (Points.) ————————

Learners: (Attention to line.)

Instructor: (Pause.)

Instructor: (Taps.)

Learners: "No."

Instructor: "Fantastic. You've got it!"

At the end of this kind of sequence the learners have learned a concept. With most concepts more complex than shapes it would, of course, require many more examples and nonexamples. In the interest of brevity, however, your author has used a minimum number.

Summary and Recommendations

This presentation has attempted to focus the reader's attention on the advantages of applying the direct instructional method to large group instruction. The author has pointed out some possible problems with this application and at the same time taken the position that even with these "problems" systematic large group instruction has many advantages over the appropriate comparison alternative (nonsystematic large group instruction).

Finally, two examples of direct instruction were offered, one related to tasks and the other related to concepts.

In closing, this author has taken a position related to large group instruction. Thus far, this position is based on logic and the method's previously demonstrated success in small groups. Therefore, it should be recommended prior to wholesale adoption that this position be empirically tested with large groups (25-35) of learners which include handicapped learners. Acceptance or rejection of this method could then be based on empirical support or lack thereof.

Direct Instruction

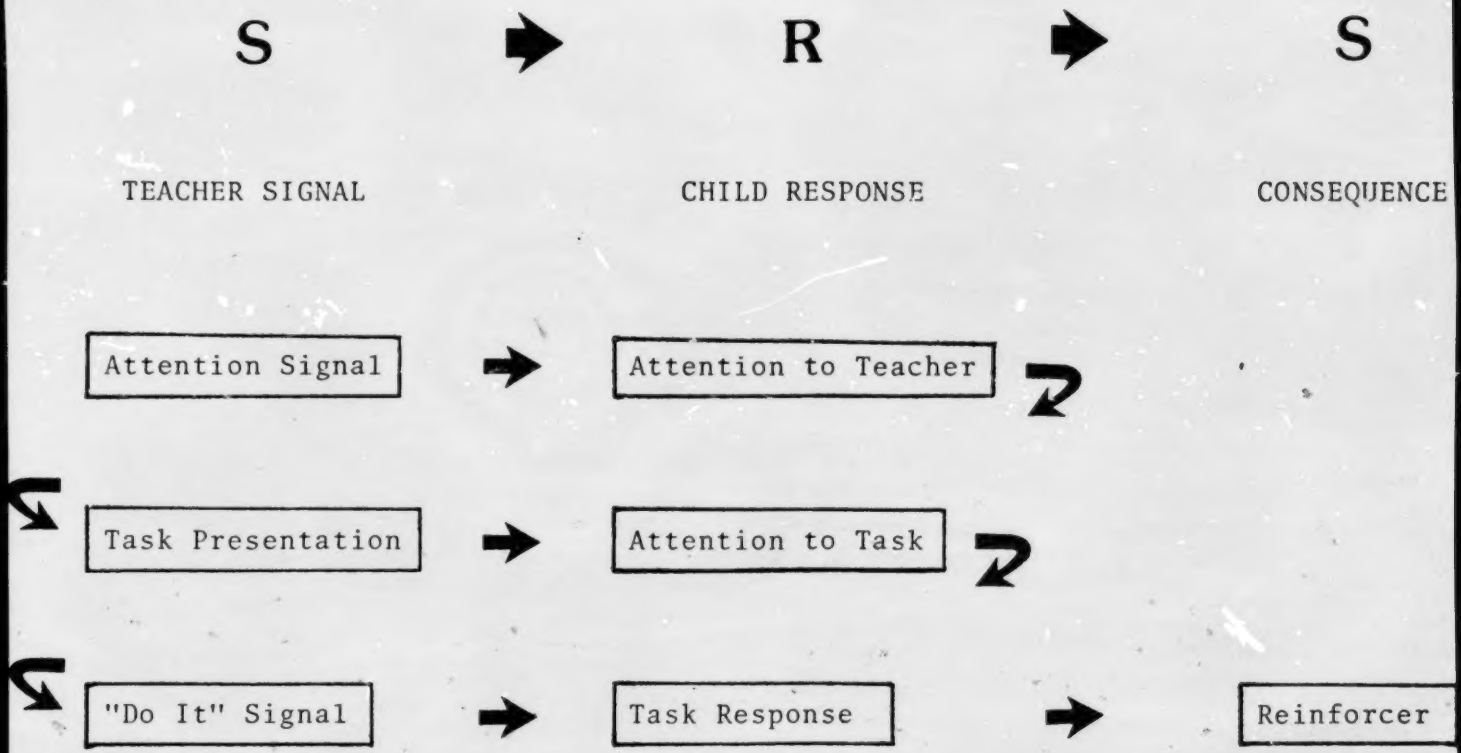


Figure 1. The Direct Instructional Method
(Becker, Engelmann and Thomas, 1975)

References

Becker, W. C. and Englemann, S. Summary Analyses of Five-Year Data on Achievement and Teaching Progress with 14,000 in 20 projects, Technical Report 73-2 (Eugene, Oregon: University of Oregon Follow Through Project), December 1973.

Becker, W. C., Engelmann, S. and Thomas, D. R. Teaching 2: Cognitive Learning and Instruction. Science Research Associates: Chicago, 1975.

Hofmeister, A. M. Educating the Mildly Handicapped Child, Field Test Edition. Utah State University: Logan, Utah, 1977.